

CITY OF PHILADELPHIA
Department of Public Health
Public Health Services
Air Management Services

Statement of Basis

To: File
From: Biji Pandisseril
Date: 3/21/14
Subject: Reactivation of South Yard South Flare.

Description:

PES has submitted a plan approval application to reactivate the South Yard South Flare which was out of service.

Summary:

The facility is a major source as due to the facility's potential to emit Volatile Organic Compounds (VOC), Nitrogen Oxides (NOx), Particulate Matter less than 10 microns (PM-10), Sulfur Oxides (SOx), Carbon Monoxide (CO), and Hazardous Air Pollutants (HAPs).

PES on September 25, 2013 was allowed to temporary reactivation and replacement of the PB South Yard South Flare and now has requested to permanently operate the South Yard South Flare as an alternate to the South Yard North Flare.

The reactivation would include the replacement of ZEECO flare tip and ignition system, installation of dedicated IR camera for monitoring of retractable thermo well at each of the four (4) pilots, repairs on the knock-out drum, and replacement of existing flare water seal drum. The flare will also operate with a flare gas recovery system.

Permit Requirements:

The South Yard South Flare was included in the Consent Decree but was considered out of operation. The facility will be required to meet all applicable requirements of the Consent Decree upon permanent start up.

Since the project does not meet the definition of modification in accordance with 60.100a(c) the flare would be required to meet Subpart J at this time and will be required to meet Ja beginning with 11/2015. At which time the Permittee would need to submit the Flare Management Plan.

The reactivation of the flare does not increase any emission therefore does not NSR or PSD.

The facility will be required to meet the requirement of 40 CFR 60.18 and the Consent Decree. The refinery fuel gas is required to be less than 0.10 gr/dscf on 3 hour average. The facility is required to monitor the fuel gas burnt in the pilot on a continuous basis. The facility will monitor the H2S content at the PB Fuel Gas Mix Drum.

The facility is required to meet 300 BTU/scf of net heating value and velocity of less than 400 ft/sec. The facility is required to demonstrate compliance via engineering calculations as required in 40 CFR 60.18.

Commented [wp1]: What does the term "out of operation" mean in the context of PSD/NSR

Commented [wp2]: Provide these requirements in the Statement of Basis.

Commented [wp3]: See attachment for comment.

The flare is required to operate whenever gases are vented to the flare and a pilot flame is required at all times. The facility will use IR camera to monitor the flare pilot flame.

Any malfunction and corrective actions is required to be investigated and reported in accordance with the Consent Decree.